

### ABSTRACT

An apparatus for cleaning a surface within a vessel is supported at least partially above a support surface. The apparatus had an elongate combustion conduit extending from an upstream end to a downstream end. The downstream end is associated with an aperture in a wall of the vessel and positioned to direct a shock wave toward the surface. A guide member is on the support surface. A number of support assemblies support the combustion conduit at a number of locations along a length of the combustion conduit and engage the at least one guide member.